

(19) World Intellectual Property
Organization
International Bureau



555030

(43) International Publication Date
18 November 2004 (18.11.2004)

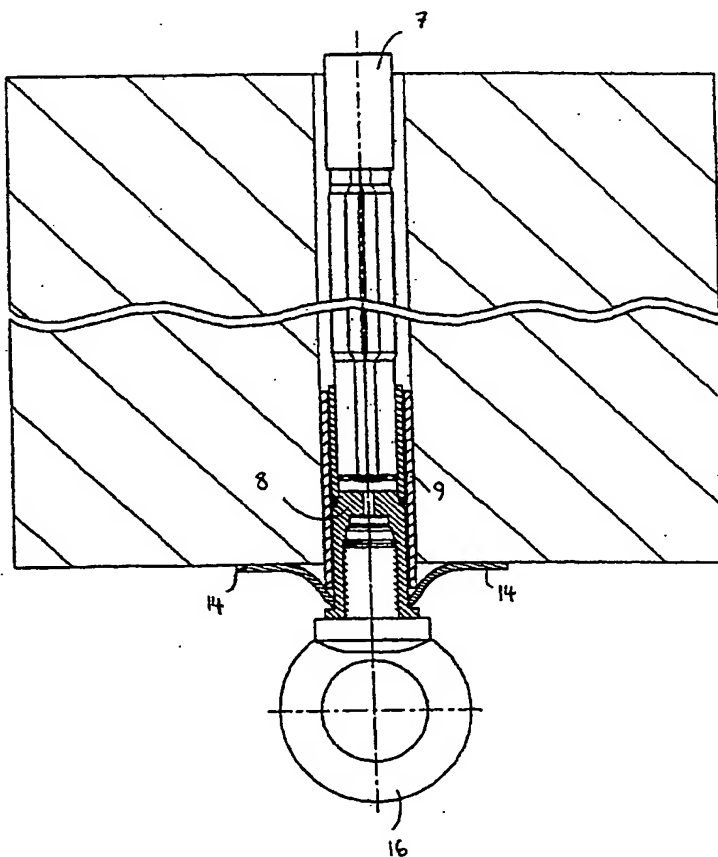
PCT

(10) International Publication Number
WO 2004/099571 A1

- (51) International Patent Classification⁷: **E21D 21/00, E21F 17/02**
- (21) International Application Number: **PCT/SE2004/000732**
- (22) International Filing Date: **12 May 2004 (12.05.2004)**
- (25) Filing Language: **English**
- (26) Publication Language: **English**
- (30) Priority Data:
0301374-5 **12 May 2003 (12.05.2003)** **SE**
- (71) Applicant (for all designated States except US): **ATLAS COPCO ROCK DRILLS AB [SE/SE]; Patent, S-70 191 Örebro (SE).**
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **KANFLOD, Morgan [SE/SE]; Rimmaguvägen 92, S-705 92 Örebro (SE).**
- (74) Agent: **EHRNER & DELMAR PATENTBYRÅ AB; P.O. Box 10316, S-100 55 Stockholm (SE).**
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): **ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),**

[Continued on next page]

(54) Title: **EXPANDABLE ROCK BOLT AND ROCK BOLTING SYSTEM**



(57) Abstract: The present invention is related to a rock bolt (7), expandable by means of a pressure media, for insertion into a borehole. The expandable bolt (7) comprises a connection unit (8) with means (11) for detachable interaction with an expansion means (10) for expansion of the rock bolt (7), as well as with a suspension element (16). The connection unit is designed with such external dimensions so that it may be inserted into the borehole. The invention also relates to such a rock bolting system.

WO 2004/099571 A1



European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*